

**CHUKA UNIVERSITY**  
**UNIVERSITY EXAMINATIONS**  
**YEAR ONE EXAMINATION FOR THE AWARD OF POST GRADUATE**  
**DIPLOMA IN EDUCATION**  
**COSC 701: COMPUTER USE AND APPLICATION IN EDUCATION**  
**STREAM: TIME: 3 HOURS**  
**DAY: DATE:**

**INSTRUCTIONS**

1. Answer question **ONE** and any other **TWO** questions
2. Marks are awarded for clear and concise answers
3. **Note that only Question ONE (Section A) and the first TWO attempted questions in section B will be marked.**

**SECTION A-COMPULSORY**

**Question ONE-30 marks**

- (a) Computer memory is a very key component of a computer system without which, no data can be stored or processed. Give **FOUR** types of secondary memory storage [**4 marks**]
- (b) Differentiate between the following output devices:
- (i) Liquid Crystal Display (LCD) Monitor and Thin Film Transistor (TFT) Monitor [**4 Marks**]
  - (ii) Impact and non-impact printers [**4 Marks**]
  - (iii) Drum scanners and Slide scanners [ **4 Marks**]
- (c) While giving examples in each differentiate between a spreadsheet programme and a word processor [**4 marks**]
- (d) Give **TWO** features of Microsoft word and **TWO** features of Microsoft excel that are very useful to an English teacher in secondary school [**4 Marks**]
- (e) Briefly discuss **THREE** advantages that a school may benefit from after they develop their own web portal [**3 marks**]
- (f) The Media input devices are generally used in media for communicating with the mass audiences. Give **THREE** most popularly used media input devices [**3 Marks**]

**SECTION B-Answer any TWO questions from this section**

**Question TWO-15 marks**

- (a) One important application of internet in education sector is elearning.
- (i) Briefly describe what elearning is [**2 Marks**]

- (ii) Give **THREE** advantages of elearning over classroom interaction between a learner and a teacher **[3 Marks]**
- (iii) Describe **THREE** features of web conferencing software that make them suitable for online teaching/learning **[3 Marks]**
- (iv) Give **THREE** web conferencing software that a school can adopt for online teaching **[3 Marks]**
- (v) Describe the concept of virtual classroom and how you can implement it **[4 Marks]**

**Question THREE-15 marks**

A word processor is an application program for manipulating characters, words and sentences to make them attractive and presentable. It incorporates very powerful formatting features in writing research dissertations, this application is very crucial.

- (a) Give at least **THREE** word processing applications in the market today useful in Desktop computers **[3 Marks]**
- (b) What is the relevance of the following word processing features?
- |                        |                  |
|------------------------|------------------|
| (i) Tables             | <b>[3 Marks]</b> |
| (ii) Table of contents | <b>[3 Marks]</b> |
| (iii) Section breaks   | <b>[3 Marks]</b> |
| (iv) Thesaurus         | <b>[3 Marks]</b> |

**Question FOUR-15 marks**

- (a) Differentiate between Database and Database management System **[2 Marks]**
- (b) What is the role of the following ms-access database objects :
- |             |                  |
|-------------|------------------|
| (i) Table   | <b>[2 Marks]</b> |
| (ii) Form   | <b>[2 Marks]</b> |
| (iii) Query | <b>[2 Marks]</b> |
- (c) You have been assigned a task of creating a students' database in a school using Ms-access.
- (i) Justify the need of such a database **[3 Marks]**
- (ii) Describe **TWO** security features you would implement to protect data **[4 Marks]**

**Password authentication  
Authorization**

**Question FIVE (15 marks)**

- (a) You have been invited to present a talk on "Role of educational institutions in vision 2030". You are supposed to prepare a PowerPoint presentation. Briefly discuss **FIVE** characteristics of a good PowerPoint presentation that you would factor as you prepare this presentation **[5 marks]**

(b) Recently, a number of learning institutions have abandoned use of blackboard and chalk and in place adopted use of PowerPoint presentations or a combination of both in delivering content to the learners. Justify this adoption [**5 marks**]

(c) Microsoft excel is a powerful computer tool used by researchers. Give **FIVE** features of Microsoft excel application that are of interest to a teacher [**5 marks**]